CLAIMS

1. A device for multiplexing of data comprising

a first multiplexer having

first live signal inputs for signals transmitted live

and/or

first bitrate inputs for which appropriate bitrate needs to be maintained

and/or

first weight inputs with priorities defined by a weight coefficient,

a first output and

modules connected to said first inputs for receiving packet request commands which request reading of packets at said inputs and sending the packets to the first output wherein the multiplexer merges signals from said first inputs into a first single stream fed at the first output and wherein the said first inputs are buffered.

2. The device for multiplexing according to claim 1 wherein the weight coefficient is a number from 0 to n defining a rate at which data is read from each input of the first weight inputs and showing how many times more often will the data be read from a given first weight input, as compared with a first weight input of the lowest priority, equaling 1.

3. The device for multiplexing according to claim 1 wherein the first live signal inputs have the highest priority, the bitrate inputs transmitting television signals have medium priority, and the weight inputs have the lowest priority.

4. The device for multiplexing according to claim 1 wherein data appearing at the first live signal inputs as packets is immediately sent to the first output and wherein only data from the highest priority input is guaranteed to be sent without any delays.

5. The device for multiplexing according to claim 1 wherein data appearing at the first bitrate inputs is read with a specific bitrate defined by a number larger than 0.

6. The device for multiplexing according to claim 1 further comprising a second multiplexer having

second live signal inputs for signals transmitted live and/or second bitrate inputs for which appropriate bitrate needs to be maintained and/or second weight inputs with priorities defined by the weight coefficient, where one of said second multiplexer inputs is linked to the first output of the first multiplekser,

a second output and

modules connected to said second multiplexer inputs for receiving packet request commands which request reading of packets at said second inputs and sending the packets to the second output wherein the second multiplexer merges the signals from said second inputs into a second single stream fed at the second output and wherein said second inputs are buffered.

7. A method for multiplexing of data in a system for dataflow management using multiplexers comprising

receiving by a multiplekser a request for a packet;

checking if any live signal inputs are connected to the multiplexer;

initiating a procedure of reading packets from the live signal inputs and checking if a packet is available;

reading and sending a found packet to an output when the packet was available until all live signal inputs are checked and packets are sent;

checking if any bitrate inputs are connected to the multiplexer;

checking if a sum of bitrates of the bitrate inputs is smaller than a bitrate of a multiplexer output;

initiating a procedure of checking for packets using bitrate when the bitrate inputs are found available and the sum of the bitrates of the bitrate inputs is smaller than the bitrate of the multiplexer output and sending found packets until all packets are sent;

treating the bitrates of the bitrates inputs as weight coefficients when the sum of the bitrates of the bitrates inputs is greater than the bitrate of the output and treating the bitrates inputs as weight inputs;

initiating a procedure of searching for packets at the weight inputs when the weight inputs are found available and sending found packets until all packets are sent;

sending information about packet unavailability when no packets are available; and

waiting for the request for a packet.